## WHAT IS CLAIMED IS:

5

15

20

1. A method comprising:

ascertaining that a first mobile equipment unit and a second mobile equipment unit are coupled to a common mobile communication switching network having a controller and coupled to a core network; and

transferring data between said first and said second mobile equipment units via the controller without transferring said data through the core network.

10 2. The method of claim 1, wherein ascertaining that a first mobile equipment unit and a second mobile equipment unit are coupled to a common mobile communication switching network includes:

receiving a digital address of said second mobile equipment unit from said first mobile equipment unit; and

using said digital address to check whether said second mobile equipment unit associated with said digital address is located inside said common mobile communication switching network.

- 3. The method of claim 1, further comprising allowing said switching network to send information about the locations of said first and said second mobile equipment units to said core network so as to enable said core network to initiate said data transfer.
- 4. The method of claim 3, wherein allowing said switching network to send location information to said core network includes said switching network informing a first network controller in said core network that said second mobile equipment unit is coupled to said common mobile communication switching network, wherein said first network controller is configured to control electrical communication to and from said first mobile equipment unit.
  - 5. The method of claim 4, further comprising said first network controller establishing a connection with a second network controller in said core network to

30

facilitate said data transfer between said first and said second mobile equipment units, wherein said second network controller is configured to control electrical communication to and from said second mobile equipment unit.

- 5 6. The method of claim 1, further comprising allowing said core network to transfer non-data signaling information between any of said first and said second mobile equipment units and said switching network via said second interface without transferring said non-data signaling information via said first interface.
- 10 7. A mobile communication system comprising:

15

20

25

30

a switching network configured to determine whether a first mobile equipment unit and a second mobile equipment unit are coupled to said mobile communication system and to generate an indication when said first and said second mobile equipment units are coupled to said mobile communication system; and

a core network configured to receive said indication from said switching network and to responsively transfer data between said first and said second mobile equipment units via a first interface without transferring said data via a second interface, wherein said core network is configured to connect said first and said second mobile equipment units to said switching network and wherein said first interface is present only inside said core network, and wherein said second interface is present between said core network and said switching network.

8. The mobile communication system of claim 7, wherein said switching network is configured to perform the following to determine whether said first and said second mobile equipments are co-located:

receive a digital address of said second mobile equipment unit from said first mobile equipment unit; and

use said digital address to check whether said second mobile equipment unit associated with said digital address is coupled to said mobile communication system.

9. The mobile communication system of claim 7, wherein said indication includes information about said first and said second mobile equipment units coupling to said mobile communication system so as to enable said core network to initiate said data transfer.

5

15

20

30

10. The mobile communication system of claim 9, further comprising:

a first network controller in said core network configured to control electrical communication to and from said first mobile equipment unit,

wherein said first network controller is configured to receive said information from said switching network to which said second mobile equipment unit is coupled.

11. The mobile communication system of claim 10, further comprising: a second network controller in said core network configured to control electrical communication to and from said second mobile equipment,

wherein said first network controller is configured to establish a connection with said second network controller to facilitate said data transfer between said first and said second mobile equipment units.

- 12. The mobile communication system of claim 7, wherein said core network is further configured to transfer non-data signaling information between any of said first and said second mobile equipment units and said switching network via said second interface without transferring said non-data signaling information via said first interface.
- 25 13. A switching network for a mobile communication system, configured to: determine whether a first mobile equipment unit and a second mobile equipment unit are located inside said mobile communication system; and

instruct an access network configured to connect said first and said second mobile equipment units to said switching network in said mobile communication system to transfer data between said first and said second mobile equipment units via a first interface coupled to said access network without transferring said data via a second interface coupled between said access network and said switching network

when said first and said second mobile equipment units are co-located in said switching network.

14. The switching network of claim 13, wherein said switching network is configured to perform the following to determine co-location of said first and said second mobile equipment units:

receive a digital address of said second mobile equipment unit from said first mobile equipment unit; and

use said digital address to check whether said second mobile equipment unit associated with said digital address is located inside said mobile communication system.

10

15

20

25

30

15. An access network for a mobile communication system, configured to connect a first mobile equipment unit and a second mobile equipment unit in said mobile communication system to a switching network, said access network configured to:

transfer data between said first and said second mobile equipment units via a first interface present only inside said access network, without transferring said data via a second interface present between said access network and said switching network; and

further transfer non-data signaling information between any of said first and said second mobile equipment units and said switching network via said second interface without transferring said non-data signaling information via said first interface.

16. The access network of claim 15, wherein said access network is further configured to:

receive an indication from said switching network that said first and said second mobile equipment units are located inside said mobile communication system; and

initiate said transfer of data between said first and said second mobile equipment units after receiving said indication from said switching network.

17. A computer readable data storage medium having stored thereon instructions which, when executed by one or more processors, cause said one or more processors to collectively perform the following:

configure a switching network in a mobile communication system to ascertain that both of a first mobile equipment unit and a second mobile equipment unit are located inside said mobile communication system; and

5

10

20

25

30

further configure an access network in said mobile communication system and coupled to said first and said second mobile equipment units and to said switching network to transfer data between said first and said second mobile equipment units via a first interface present only inside said access network without transferring said data via a second interface present between said access network and said switching network after co-location of said first and said second mobile equipment units is ascertained by said switching network.

15 18. The data storage medium of claim 17, wherein said instructions, upon execution, further cause said one or more processors to collectively perform the following:

further configure said switching network to inform a first network controller in said access network that said second mobile equipment unit is located inside said mobile communication system, said first network controller being configured to control electrical communication to and from said first mobile equipment unit.

19. The data storage medium of claim 18, wherein said instructions, upon execution, further cause said one or more processors to collectively perform the following:

configure said first network controller to establish a connection with a second network controller in said access network to facilitate said data transfer between said first and said second mobile equipment units, wherein said second network controller is configured to control electrical communication to and from said second mobile equipment unit.

20. The data storage medium of claim 17, wherein said instructions, upon execution, further cause said one or more processors to collectively perform the following:

further configure said access network to transfer non-data signaling information between any of said first and said second mobile equipment units and said switching network via said second interface without transferring said non-data signaling information via said first interface.

5